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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10:073,149	02/13/2002	Erik Carlsson	3670-44	5454

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EXAMINER

NGUYEN, JIMMY

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,149

Applicant(s)

CARLSSON ET AL.

Examiner

Jimmy Nguyen

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0820.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the word "fig 2 at the bottom of the abstract". Correction is required. See MPEP § 608.01(b).

Claim Objections

1. Claims 1 and 10 are objected to because of the following informalities: the word "characterized" is in different font and size. Appropriate correction is required.
2. Claim 5 is objected to because of the following informalities: pf is miss spelling. Appropriate correction is required.
3. Claim 10 is lacking the method step. Correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 –18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahn (US 6211734) in view of Park et al (US 5986500).

As to claim 1, Ahn (fig 4) discloses

Device (fig 4) for use in the detection of the power that passes

through an electronic device, comprising means (41) for division of the

Art Unit: 2829

power that enters the device into a first (first signal go to path 42) and a second branch (second signal go to path 41), each branch having a predetermined proportion of the total input power with a predetermined phase difference between the signals that go into the branches, further comprising a first power detector for the first branch, a second power detector for the second branch, and means (45) for summation of the power in the two branches (42,43), c h a r a c t e r i z e d in that the first and the second power detectors are calibrated for different sub-ranges of a dynamic range within which it is desired to carry out the power detection, and in that the means (45) for summation can be controlled with regard to which branch and thereby to which power detector (140, 150) the sum of the power is diverted, and in that the device comprises, in at least one of its branches, means (46) for said control of the summator.

However, Ahn is not disclose the first and second power detector coupled at the output of the first and second branch. On the other hand, Park et al (fig 6) had used diodes (454 and 455) as power detector at the output of the amplified signal.

Therefore, at the time of invention was make one with an ordinary skill in the art will use the structure of the amplifier device to connect with a diode to amplify and detect out signal of the system for the purpose of converting the multiple signal into DC signal without error and precisely (COLUM 12 LINE 20 -28 of Park et al)

Art Unit: 2829

As to claim 2, Park et al (fig 6) discloses device (100,200) according to claim 1 , in which device the sub-ranges for which the first (454) and the second (454) power detectors are calibrated are overlapping

As to claims 3, 4, Ahn (fig 4) discloses device (100, 200) according to Claim 1 or 2, in which the means for division (41) of the power and the means (45) for summation both comprise a summator and it is designated in MMIC technology.

As to claim 5, Ahn (fig 4) discloses device according to any of the previous claims, in which the means for controlling the summator comprises a controllable phase shifter (47, 46).

As to claim 6, Ahn (fig 4) discloses device according to any one of the preceding claims, further comprising means for amplification (42b, 43a) in each branch of the device.

As to claim 7, Ahn (fig 4) discloses device according to any one of the preceding claims, comprising means for controlling (46) the means for summation in both the first branch (42) and the second branch (43).

As to claims 8 and 9, Ahn (fig 6) device according electronic device for to any one of the preceding which the invention is used is claims, in which the a device for the

transmission and reception of electromagnetic energy (Rf signal).

As to claims 10 –18, In *In re King*, 801 F.2d 1324, 1326 USPQ 136, 138 (Fed. Cir. 1986) it was held that: "Under the principles of Inherency, if a structure in the prior art necessarily functions in accordance with the limitations of a process or method claim of an application, the claim is anticipated." The court added, however, that: "This is not to say that the discovery of a new use for an old structure based on unknown properties of the structure might not be patentable to the discoverer as a process. *In re Hack*, 245 F.2d 246, 248, 114 USPQ 161, 163 (CCPA 1957)."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen at (703) 306-5858. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

JN.
August 20, 2003